Self-Efficacy as a predictor of entrepreneurial interest among university students: A quantitative study

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Abstract: Entrepreneurship is increasingly seen as an important strategy in reducing unemployment among college graduates and promoting economic resilience. This study aims to examine the predictive role of self-efficacy an individual's belief in their ability to complete a specific task in shaping entrepreneurial interest among university students. Self-efficacy is believed to influence how individuals perceive opportunities and challenges in starting a business, thereby playing a central role in entrepreneurial motivation. A descriptive quantitative approach was used in this study, with data collected through a structured questionnaire distributed to 348 students from nine faculties at the University of Padang. The questionnaire was designed using a Likert scale to measure levels of self-efficacy and interest in entrepreneurship. Data analysis was conducted using descriptive tests, normality, linearity, homogeneity, and hypothesis testing using Pearson's correlation. The results of the study showed a positive and significant relationship between self-efficacy and entrepreneurial interest (significance value= 0.012), with a Pearson correlation coefficient of 0.113, indicating a moderate relationship. Most students demonstrated relatively low levels of self-efficacy and interest in entrepreneurship, but students with high self-efficacy tended to have greater interest in entrepreneurship. These findings emphasize the importance of integrating self-confidence building into university entrepreneurship programs to enhance students' readiness and motivation to enter the entrepreneurial world after graduation.

Keywords: self-efficacy; interest in entrepreneurship; quantitative analysis; psychological predictors

1.   Introduction

Unemployment among college graduates is a serious challenge faced by many developing countries, including Indonesia (Agustina et al., 2024). One of the main causes is the low readiness of graduates to create their own jobs. Most students still tend to be oriented toward becoming job seekers rather than job creators (Rodriguez & Lieber, 2020). Therefore, fostering entrepreneurial interest among students has become a strategic necessity in facing an increasingly competitive and dynamic job market (Naudé, 2010). Entrepreneurship plays a crucial role in driving economic growth, innovation, and social development. In an ever-changing global context, entrepreneurship is not only a source of personal income but also a key contributor to the creation of new economic value and social resilience (Doran et al., 2018). Studies show that countries with high levels of entrepreneurship tend to be more resilient in the face of economic crises (Audretsch, 2007). Students, as a productive and highly educated group, have great potential to become drivers of change through entrepreneurial activities (Fadzil et al., 2025). Motivation and interest in entrepreneurship are not formed instantly. These interests are influenced by various factors, both external, such as entrepreneurship education, and internal, such as self-confidence or self-efficacy

(Bandura, 1997). Self-efficacy plays an important role in encouraging action, maintaining efforts in the face of challenges, and shaping attitudes toward business risks(Chou et al., 2024).

Previous research has shown that self-efficacy has a significant positive correlation with interest and intention to engage in entrepreneurship. Individuals with high levels of self-efficacy are more likely to feel confident about starting and managing their own businesses (Zhao et al., 2005). They are also more resilient to pressure and failure, and more persistent in pursuing innovative business opportunities. Therefore, strengthening self-efficacy is key to building a sustainable entrepreneurial ecosystem in higher education settings (Wardana et al., 2024). Although entrepreneurship education has become a mandatory part of the curriculum at many universities in Indonesia, including the University Negeri Padang, many students still do not show strong interest in becoming entrepreneurs (Patrisia et al., 2019). This indicates a gap between theoretical understanding and psychological readiness to face the business world. Psychological factors such as self-efficacy have not been fully developed in the entrepreneurship learning process (McGee et al., 2009).

Universities play a central role in shaping students' entrepreneurial character through curriculum, practical training, and ongoing mentoring(Chien-Chi et al., 2020). In addition to cognitive aspects and technical skills, affective aspects such as self-confidence and perception of business opportunities also need to be strengthened through mentoring programs and business simulations (Ndofirepi, 2022). Research examining the relationship between self-efficacy and entrepreneurial interest can provide valuable insights into the design of more effective entrepreneurship education programs (Deliana, 2023). Based on this background, this study aims to examine the relationship between self-efficacy and entrepreneurial interest among students at Universitas Negeri Padang. Using a descriptive quantitative approach, this study is expected to provide an empirical picture of the extent to which self-efficacy can be a predictor of entrepreneurial interest, as well as provide practical implications for curriculum development and higher education policy in Indonesia.

2. Methods

This study uses a quantitative approach with a descriptive method to explain the relationship between self-efficacy and entrepreneurial interest among students. A quantitative approach was chosen because it allows researchers to test hypotheses statistically and obtain conclusions that can be generalized to a wider population (Creswell & Creswell, 2017). The descriptive method was used to describe the characteristics of the respondents and to explain the relationship between the two research variables in a systematic and factual manner.

This research was conducted at the main campus of Universitas Negeri Padang, located on Jalan Prof. Dr. Hamka, Air Tawar Barat, Padang City, Indonesia, during the July–December 2023 semester. The population in this study was all active students from the 2020 cohort, totaling 6,960 people. The sampling technique used was simple random sampling to ensure that every individual in the population had an equal chance of being selected as a sample (Etikan, 2017). Based on the Slovin formula and validity considerations, the sample size was determined to be 348 students, with 30 of them used for instrument testing.

Data were collected using an online questionnaire distributed via Google Forms. The research instrument was designed as a 5-point Likert scale, measuring two main variables: self-efficacy (independent variable) and interest in entrepreneurship (dependent variable). Each indicator in the questionnaire was developed based on Bandura's theory of self-efficacy (Bandura, 1997), and the theory of entrepreneurial interest widely used in previous research. The quality of the instrument was tested through validity and reliability. Validity was tested by correlating each item with the

total score using the Corrected Item-Total Correlation technique, while reliability was measured using Cronbach's Alpha coefficient. A Cronbach's Alpha value > 0.7 indicates that the instrument has good internal consistency (Tavakol & Dennick, 2011). Data analysis techniques include descriptive analysis (mean, median, mode, standard deviation), as well as classical assumption tests such as normality tests (Kolmogorov-Smirnov), linearity tests, and homogeneity tests. To test the hypotheses, Pearson Product Moment correlation analysis was used. Relationships were considered significant if the significance value (p-value) was < 0.05.

3.   Results

3.1   Descriptive analysis

Descriptive analysis is intended to provide an explanation of the picture being studied through sample data. In this analysis process, descriptive statistical methods are applied, including mean, standard deviation, maximum value, and minimum value using SPSS version 23 to understand the characteristics of the data. Based on the data analysis results, for the self-efficacy variable (X) with a total of 13 statements and consisting of 3 indicators, the mean value was 31, the median value was 31, the mode value was 30, the standard deviation was 3.931, the minimum value was 18, and the maximum value was 46, with a total of 348 student respondents. Meanwhile, for the entrepreneurial interest variable (Y), with a total of 14 statements and 4 indicators, the mean value was 34, the median value was 34, the mode value was 33, the standard deviation was 4.306, the minimum value was 22, and the maximum value was 44, with a total of 348 student respondents.

Table 1.   Descriptive analysis

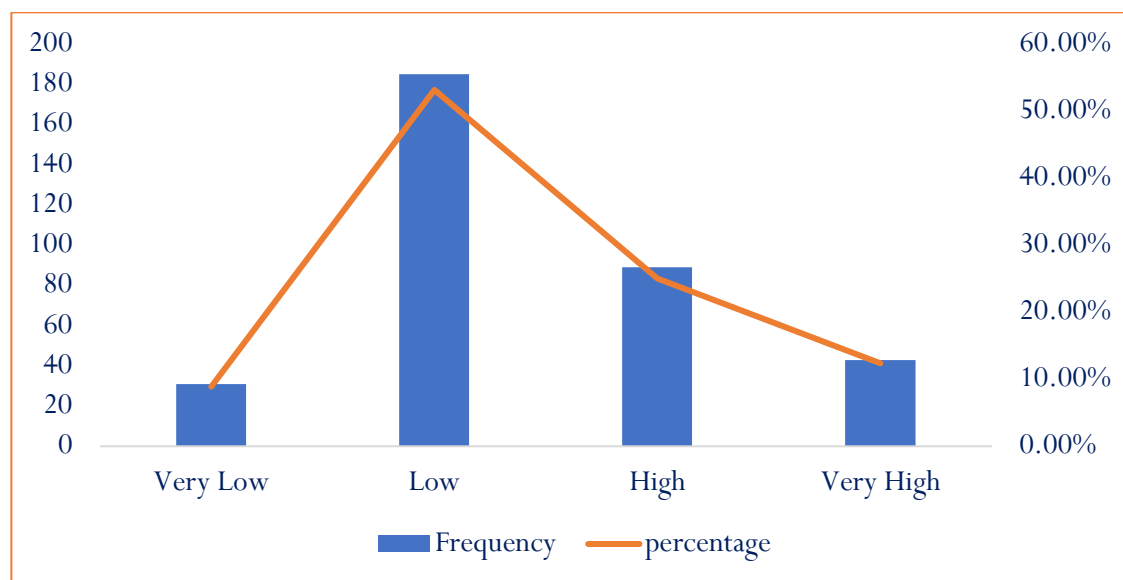|	Self efficacy	Entrepreneurial interest
Mean	31	34
Median	31	34
Mode	30	33
Std. Deviation	3,931	4,268
Minimum Value	18	22
Maximum Value	46	44

Figure 1.   Frequency distribution of students' self efficacy tendencies

Figure 1 shows that out of 348 respondents, the total self-efficacy tendency was obtained, with 31 students (8.9%) having very low self-efficacy, 185 students (53.16%) having low self-efficacy, 89 students (25%) having high self-efficacy, and the remaining 43 students (12.35%) having very high self-efficacy. Therefore, it can be concluded that the most common self-efficacy tendency among students at the University of Padang is in the low category.
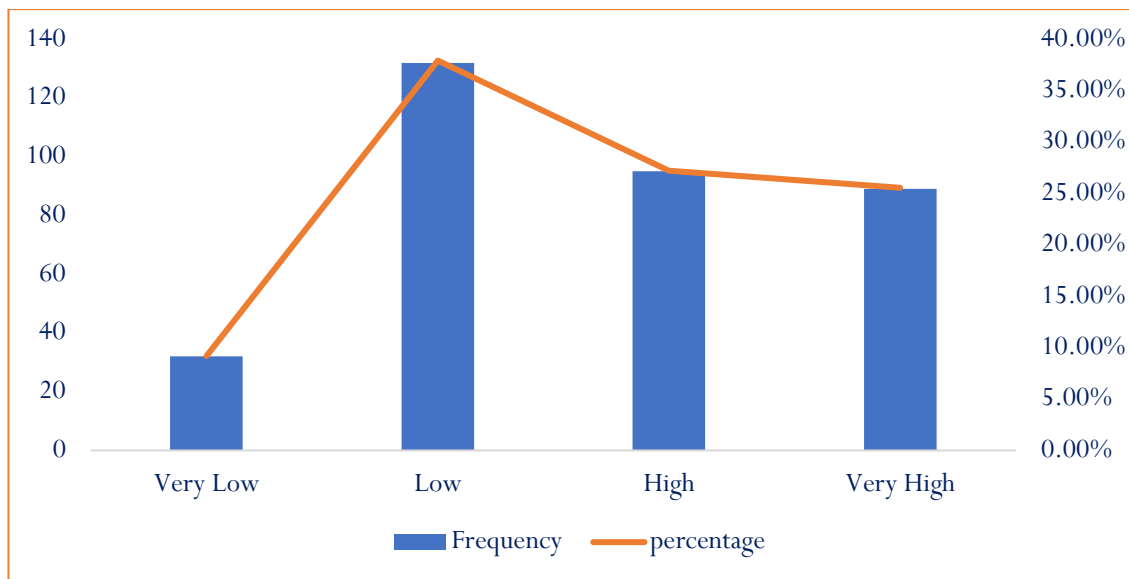

Figure 2. Frequency distribution of students' entrepreneurial interests

Based on Figure 2, it can be seen that out of 348 respondents, there is a total tendency of interest in entrepreneurship, with 32 students (9.19%) having very low interest in entrepreneurship, 132 students (37.93%) having low interest in entrepreneurship, 95 students (27.2%) have high interest in entrepreneurship, and 89 students (25.57%) have very high interest in entrepreneurship. Based on this data analysis, it is concluded that the most common level of interest in entrepreneurship among students at the Universitas Negeri Padang falls into the low category. The total number of respondents based on the student faculty of Universitas negeri Padang can be seen in table 2.

Tabel 2. Total number of respondents

Faculty	Number of respondents	Percentage
Faculty of Engineering	21	6%
Faculty of Mathematics and Natural Sciences	32	9%
Faculty of Tourism and Hospitality	44	12,6%
Faculty of Languages and Arts	38	11%
Faculty of Education	50	14%
Faculty of Psychology and Health	44	12,6%
Faculty of Social Sciences	43	12%
Faculty of Economics	45	12.9%
Faculty of Sports Sciences	31	8.9%

3.2   Normality test

The normality test is used to determine whether the distribution of independent variables is normal or not. The analysis results show a significance value for the variables of self-efficacy and interest in entrepreneurship of $0.200 > 0.05$. The conclusion is that both variables follow a normal

distribution. The results of data processing using the one-sample Kolmogorov-Smirnov test can be seen in Table 3.

Table 3. Normality test

Description	One-Sample Kolmogorov-Smirnov
Asymp. Sign (2-tailed)	200c,d

3.3 Linearity test

The linearity test is useful for determining whether there is a linear relationship between each independent variable and dependent variable. The analysis results show a significance value of 0.336>0.05. Therefore, in this case, it can be concluded that there is a linear relationship between self-efficacy and interest. The data processing results can be seen in Table 4.

Table 4. Linearity test

Description	Sig.
Deviation from Linearity	0.336

3.4 Homogeneity test

The homogeneity test is used to assess whether the variation in data groups is the same or different. The homogeneity test results obtained a significant value of $0.294 > 0.05$. Therefore, in this case, it can be concluded that there is a homogeneous relationship between self-efficacy and entrepreneurial interest among students at Universitas negeri Padang.

Table 5. Homogeneity test

Levene Statistic	df1	df2	Sig.
3.129	1	694	0.077

3.5 Hypothesis testing

Hypothesis testing is a temporary statement that requires testing, and therefore serves as a probability for testing the validity of a particular theory. The basis for decision making is that if the significance value is < 0.05, then there is a correlation/relationship, and vice versa. The results of the hypothesis testing obtained a significance value of 0.012<005. According to the rule, if the significance value is < 0.05, then Ha is accepted (Ho is rejected), indicating a relationship between self-efficacy and interest in entrepreneurship. The test values can be seen in Table 6.

Table 6. Hypothesis test

Description	Hypothesis Test (T Test)
Sign. 2- tailed	0.012

4. Discussion

The results of this study indicate a positive and significant relationship between self-efficacy and entrepreneurial interest among students at Universitas Negeri Padang, with a significance value of

0.012 and a Pearson correlation coefficient of 0.113. Although the strength of the relationship is moderate, this finding aligns with previous research indicating that individuals with high levels of self-efficacy are more likely to have the intention to start a business (McGee et al., 2009; Zhao et al., 2005). Belief in one's own abilities plays a key role in building realistic perceptions of success and resilience in facing business challenges.

This discussion also highlights that the majority of respondents fall into the low category for both self-efficacy and entrepreneurial interest. This indicates significant room for intervention in strengthening students' psychological aspects through an entrepreneurship curriculum that is not only cognitive but also affective. Integrating elements of self-efficacy development into entrepreneurship education has been proven to enhance students' interest and readiness to pursue entrepreneurial paths (Ferreira-Neto et al., 2023).

Furthermore, these findings reinforce the argument that universities need to create an environment that supports the development of students' confidence in taking risks and creating economic value. Such efforts could include project-based entrepreneurship training, mentoring by practitioners, and providing business incubation platforms. Thus, this study not only affirms the contribution of self-efficacy as a psychological predictor of entrepreneurial interest but also provides an empirical basis for formulating more transformative learning strategies in shaping graduates with an entrepreneurial spirit.

5. Conclusion

This study aims to examine the relationship between self-efficacy and entrepreneurial interest among students at Universitas Negeri Padang. The results of the study show a positive and statistically significant relationship between students' self-efficacy levels and their interest in entrepreneurial activities, although the strength of the relationship is moderate. These findings support previous empirical evidence stating that self-efficacy is a psychological construct that influences entrepreneurial intentions and behavior.

The majority of respondents in this study demonstrated relatively low levels of self-efficacy and interest in entrepreneurship. This indicates a gap in current entrepreneurship education, which tends to focus more on theoretical aspects than on strengthening students' self-confidence and psychological readiness to enter the business world directly. Therefore, integrating self-efficacy enhancement strategies into the entrepreneurship curriculum is highly recommended.

This study contributes to the development of literature on entrepreneurial psychology by emphasizing the predictive role of self-efficacy in shaping students' entrepreneurial orientation. Higher education institutions are encouraged to adopt more comprehensive and experience-based learning models to foster self-efficacy and provide direct exposure to entrepreneurial practices. Strengthening these aspects will enhance students' interest in entrepreneurship and support the development of a resilient and innovation-driven economy.

Author's declaration

Author contribution

Yusni Mulyani contributed to the conceptualization, data collection, questionnaire development, and the initial drafting of the manuscript. She was responsible for conducting the fieldwork, organizing the data, and performing the preliminary analysis. **Yaumal Arbi** contributed to the

methodology design, statistical analysis, critical revision of the manuscript, and supervision of the research process. As the corresponding author, he coordinated communication with the journal, ensured compliance with publication standards, and provided overall guidance throughout the study. Both authors reviewed and approved the final version of the manuscript and agreed to be accountable for all aspects of the work.

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Conflict of interest

The authors declare that there are no competing interests related to the research or publication of this article.

Ethical clearance

This research was conducted in accordance with the ethical standards of academic research involving human participants. Prior to data collection, ethical approval and research permission were obtained from Universitas Negeri Padang under the official research permit letter 2062/UN35.2.1.T/2023. All participants were informed about the purpose of the study, and their informed consent was obtained voluntarily. Participation was anonymous, and all responses were treated with strict confidentiality. No sensitive personal data were collected, and respondents were free to withdraw from the study at any stage without penalty.

AI statement

This article is the original work of the author without using AI tools for writing sentences and/or creating/editing tables and figures in this manuscript.

Publisher's and Journal's note

Universitas Negeri Padang as the publisher, and the Editor of Jurnal Pendidikan Teknologi Kejuruan state that there is no conflict of interest towards this article publication.

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